

KW General References

- a) including front axle top mounts
- b) The battery has to be modified for vehicles with factory battery longer than 278 mm. We recommend Varta Silver Dynamic 77Ah or Bosch S5 77Ah (not included in the kit).
- c) No vehicle specific applications
- V2= KW coilover kit Variant 2 with adjustable rebound dampening
- V3= KW coilover Kit Variant 3 with adjustable rebound & compression dampening
- 3A= KW coilover kit aluminum 3-way adjustable racing shock
- i.P.) In production, development phase completed, availability on request
- i.D.) In developmental phase. Delivery date upon request
- i.P.) In preparation. Delivery date available upon request
- FA front axle
- RA rear axle

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- 21) Additional attachments are required from the automobile manufacturer (for the Fiat Bravo/Brava only available for vehicles with original sport suspension). Fiat Part No.: support bearings 00046469709 + strut insulator 00046448102
- 22) Check the rear shock absorber mounting! Standard bolt or fork?
- 23) For Variant 2: Rear axle shock does not offer hardness adjustment
- 24) In Variant 2, the original rear support bearing must be bored to a diameter of 12 mm
- 25) For rear axles adjustable threaded strut housings, for rear axle lowering springs (factory rear dampers are used)
- 26) The 8- digit strut housing number is necessary to identify the strut housing. This number is located on the inner side of the wheel bearing housing. Also, it must be determined if the vehicle has an ABS system
- 27) Strut housings for Polo G40 or Polo III built after 9/90 are only available in advance. Strut housings for Polo I/II models must be delivered in advance for the conversion
- 28) The standard self levelling shock absorber has to be replaced with the supplied sport shock absorber
- 29) Only for vehicles which have rear dampers mounted below with a M 10 screw on the underside; otherwise use Item No. 10260012 or 1526012
- 30) Only for vehicles which have rear dampers mounted below with M 14 screws on the underside; otherwise use Item No. 10260011 or 15260011
- 31) For vehicles with factory lowering is the mentioned lowering reduced by the factory lowering.
- 32) In case of Variant 2 the rear axle rebound damping can only be adjusted with special tools and if damper is dismantled.
- 33) In variant 2: rear axle shock absorber are only available in variant 3
- 34) To insure a minimum height of 350 mm for the front direction indicators (§76/756 EG), it may be necessary to install a conversion kit supplied by the automobile manufacturer. (Alfa Romeo Parts No. 46 226 968)
- 35) Only for vehicles manufactured after 1998. Model year can be found in the 10th position of the vehicle identification number (V=97, W=98, X=99, Y=2000, 1=2001,...)
- 36) Check the inner distance between the two lower clips on the front suspension strut (for 23 mm = Item No. 10290013/15290013) (for 27 mm = Item No. 10290003/15290003)
- 37) For cars which have electronic dampers, make sure they are shut down. Specific electronic damper shut-downs are available from KW. Please check our accessories list
- 38) If the rear axle shock absorber of the car is equipped with M12 thread - you need to modify the supporting bearing unit to M10 thread. Therefore please buy the following BMW parts from the car manufacturer: supporting bearing 33 52 1 132 270, washer disc 33 52 1 136 063, disc 33 52 1 129 565
- 39) For vehicles with a right drive shaft diameter of more than 42 mm, the maximum lowering tested by the TÜV. (German technical inspection association) is reduced by 15 mm
- 40) Original struts need to be sent in advance for modification
- 41) Coilover kits where the strut housings are delivered on exchange basis are only available in galvanized finish
- 42) For the rear axle sport shock absorbers will be supplied, the factory air spring will maintain. The lowering of the vehicle needs to be done according to the instructions.
- 43) Not for vehicles with Airmatic suspension
- 44) Special upper transverse link required for rear axle drop correction, KW Part No. 68510021 for sedan; 68510055 for wagon. Price on request in variant 3: rear axle shock absorber are only available in variant 2
- 45) The upper spring perch is fastened to the vehicle; a) beginning Model year 2000 and up with three fasteners to the body, b) via the support bearing that is centrally fastened through the piston rod of the shock absorber

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- 47) For vehicles manufactured before 4/02, the piston rod is fastened to the support bearing with an arched disc (piston rod threads visible). In models built after 4/02, the piston rod mount is lowered and covered by a cap (piston rod threads not visible)
- 49) From vehicle no. M45 255 with fork mounting on front axle transverse control arm
- 50) The following parts must be used for front-wheel drive and four-wheel drive vehicles without standard sports suspension. (AUDI part nos.: adapter 441 512 347 + support bearing 441 512 331 + ring 441 512 367 + curved washer 441 512 349)
- 51) Lowering can be achieved if required by adjusting the standard leaf springs.
- 52) In the case of variant 1 rear shock absorber with stiffness adjustment.
- 53) The front wheel hub and ABS sensor are among the items supplied.
- 54) Only for vehicles without air suspension
- 56) If the Porsche Motorsport rear axle top mount # 99633301190 is installed, the KW top mount adapter set # 68510036, price on request, has to be used.
- 57) Only for cars with a clamp diameter of 54,6 mm on the front axle
- 58) Only for cars with a clamp diameter of 49,8 mm on the front axle
- 59) The following part has to be used for cars which have the standard rear axle self levelling system: Volvo rear axle top mount # 306 66 271 has to be used.
- 60) Only for cars with 2-hole-bracket at front axle
- 61) Only for cars with 3-hole-bracket at front axle
- 62) Not for cars with electronic damping
- 63) To achieve the necessary clearance of the wheels on the front axle, significant modifications are necessary at the inside of the fender (at the front side of the wheel arch). On the rear axle you have to modify the chassis fold in the area of the stabilizer for achieving a sufficient clearance of the stabilizer.
- 64) At lowering of more than 40 mm an increased tire wear is possible. We recommend to use the camber adjustment set for the front axle (Mercedes article no. 210 330 00 18)
- 65) At lowering of more than 40 mm an increased tire wear is possible. We recommend to use the camber adjustment set for the front axle (Mercedes article no. 202 330 01 18)
- 66) With TÜV test report to present for homologation according to § 21 (according to German transport & traffic regulations - mainly for Germany)
- 68) When installing the pump unit components, additional mounting parts from the car manufacturer might be necessary. For that please note the vehicle specific installation instructions.
- 69) Coilover strut housing in galvanized steel construction.
- 72) Front axle strut housings on an exchange basis are available for a deposit (price on request) - otherwise, please provide original parts in advance
- 73) There is no need to install spacers on the front axle for sufficient clearance of the factory tyres.
- 74) An additional electronic control unit is necessary to shut-down the original electronic damper control. KW part-no. 660 43 001, price on request. After the installation of the electronic control unit the engine fault code needs to be deleted at a dealer.
- 75) The tread width and camber needs to be adjusted like or almost like factory according to the vehicle manufacturer's specifications. If the camber exceeds 4° at the rear axle with the maximum permissible axle load we recommend to use our adjustable control arm (KW part-no. 685 10 060 price on request)
- 76) For vehicles from 2004 onwards extreme reworking is necessary for creating sufficient clearance of the wheels. Only for cars with hole distance of 54 mm on the front axle strut (without „Pack Sport Chassis“).
- 77) At vehicles equipped with a factory sport suspension kit the electronic damper control needs to be deactivated at your local Maserati dealer (instructions for the deactivation are included in delivery)

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- 78) If the car is equipped with PASM, the PASM needs to be disabled.
- 79) Vehicles with a two-part leaf spring on the rear axle have to be equipped with a one-piece leaf spring. (for Caddy VW part no. for leaf spring 2K0 511 151 N for Caddy Maxi VW part no. for leaf spring 2K3 511 151 E)
- 80) Additional assembly parts from manufacturer required. Maserati Part No. For the front: 2x Hyperblock M205586; for the rear: 2x Hyperblock M205587; front & rear: 4x holder M200336, 4x Spacer M201167, 4x spacer ring M201904
- 81) At vehicles with four-wheel-drive the coilover kit variant 3 can only be used in combination with wheels with a size of 17" and higher.
- 82) At vehicles up to the later model 04+ addition parts of the car manufacturer are necessary; (Honda part-no. 51320-SAA-J01 + 51321-SAA-J01)
- 83) standard leaf spring has to be dismantled!
- 85) For rear axle camber adjustment we recommend the installation of the adjustable control arm from KW. KW part no 68510061 price on request
- 86) We recommend to replace the anti-sway bar for more spring travel and comfort. KW Part No. 685 50 000. Price on request. Anti-sway bar conversion set for vehicles with Xenon headlights: KW Part No. 685 50 005, Price on request
- 87) For ensuring the minimum necessary head light height of 350mm from the ground, the maximum lowering range could be reduced up to 20mm.
- 88) Electronic damping control has to be deactivated. Deactivation kit is included in the delivery.
- 90) Aluminium suspensions struts
- 91) Front and rear height-adjustable (front and rear springs with height adjustment)
- 92) Not for cars with electronic damping (adaptiv damping system ADS)
- 93) At maximum lowering, FA indicator light and day headlight beyond STVZO have to be modified
- 94) Variant 2 available while supply lasts. For more information please send an email to gewindefahrwerke@kwautomotive.de
- 95) Top mounts can also be combined with a KW coilover kit. Therefore some additionally parts have to be ordered (springs, intermediate rings). Please ask our sales department.
- 96) Without German TÜV certificate, optional with stability confirmation for individual registration according to §21 German law, clubsport top mounts generally without TÜV certificate.
- 97) Clubsport coilover with top mount: only with front axle top mount available
- 98) Clubsport coilover with top mount: with front- and rear axle top mount available
- 99) Without homologation paper

KW Suspensions

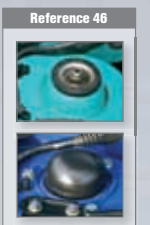
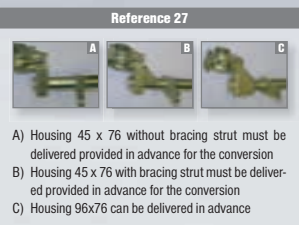
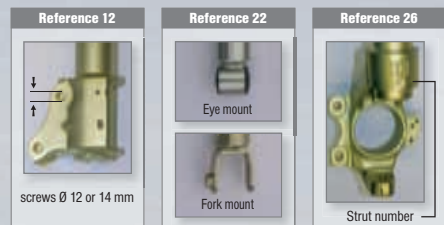
- n.I. Not available
- i.E. In development phase, delivery time on request
- 101) Not permitted for vehicles with automatic level control
- 102) For vehicles with a strut diameter of 45 mm!
- 103) For vehicles with a strut diameter of 51 mm!
- 105) Spring kit only is not available for vehicles with factory sport suspension
- 106) For vehicles with a cap diameter of 40 mm
- 107) For vehicles with a cap diameter of 80 mm
- 108) Only for vehicles with front wheel drive
- 109) These spring sets can be used only with shortened shock absorbers! We recommend our KW sport shock absorbers; see application list for front and rear shock absorbers
- 110) Rear-axle spring collar can be adjusted via multi position perch
- 112) Rear axle absorbers with eye mounting
- 113) For lowering from 45 mm at the front axle, the stabilizer must be retrofitted. Stabilizer retrofit set for vehicles without Xenon headlights 685 50 006, price on request. Stabilizer retrofit set for vehicles with Xenon headlights 685 50 007, price on request
- 114) Suspension strut mounting 52 mm hole distance
- 115) Suspension strut mounting 54 mm hole distance
- 116) Only for vehicles without a stabilizer at the front axle strut
- 117) For vehicles without a stabilizer
- 118) For vehicles with a stabilizer

KW Suspensions

- 119) Not for vehicles with an 8-cylinder engine
- 120) Not for vehicles without original sports suspension.
- 121) Only for vehicles without ESP
- 122) Shock absorbers with upper mounting nut M12
- 123) Lowering spring can be used only with a special direction indicator. Fiat order number 46 226 698
- 124) Only for vehicles where the rear shock absorber is attached at the bottom with an M10 bolt.
- 125) Only for vehicles where the rear shock absorber is attached at the bottom with an M14 bolt.
- 126) Not for vehicles with EDC.
- 127) Not for vehicles with air suspension.
- 128) Only for vehicles with a clamp diameter of 54,6 mm on the front axle
- 129) Only for vehicles with a clamp diameter of 49,8 mm on the front axle
- 130) The kit consists of only 2 front axle springs, on VW Bus T4 it consists of 2 rear axle springs
- 131) front axle spring perch is height adjustable with the spacer ring
- 132) At vehicles with original Nivomat dampers only sport suspension kits can be used. The Nivomat damper will be replaced by the supplied sport damper.
- 133) Check the inner distance between the two lower clips on the front suspension strut. (23mm = Item No. 20090011 / 27mm = Item No. 20090111)
- 134) Vehicles with level control system need to change the original level control shock absorber with the shock absorber supplied in the sport suspension kit. We recommend using our sport damper 610T5004 in addition with the spring kit.
- 135) only for vehicles with automatic level control
- 136) Front spring basis of suspension an front dampers from modell 2002 have to be replaced by new spring basis Audi part no. 4D0 412 107B
- 137) Just two front axle springs are included in the spring kit. Rear axle will be lowered by adjusting light compensation.
- 138) Not available for fun/cross models or models with rough road packages
- 139) Can only be supplied for as long as stocks last.
- 140) Front axle struts will be delivered without mount for brake hose
- 141) Front and rear height-adjustable (front and rear springs with height adjustment)
- 142) Suspensions Kits / shokabsorber not for cars with electronic damping
- 143) Excluding „full options“ models.
- 144) Only „full options“ models.
- 145) Only for vehicles with a short front-axle suspension leg housing, distance from centre of attachment hole to the top edge of the housing, 310-320 mm.
- 146) Only for vehicles with a long front-axle suspension leg housing, distance from centre of attachment hole to the top edge of the housing, 340-350mm.

KW Hydraulic Lift System

- 1) Height adjustable on the front and rear axles (threaded strut housings)
- 78) If the car is equipped with PASM, the PASM needs to be disabled.
- a) including front axle top mounts
- b) The battery has to be modified for vehicles with factory battery longer than 278 mm. We recommend Varta Silver Dynamic 77Ah or Bosch S5 77Ah (not included in the kit).
- V2= KW coilover kit Variant 2 with adjustable rebound dampening
- V3= KW coilover kit Variant 3 with adjustable rebound & compression dampening
- 3A= KW coilover kit aluminum 3-way adjustable racing shock



A) Housing 45 x 76 without bracing strut must be delivered provided in advance for the conversion
 B) Housing 45 x 76 with bracing strut must be delivered provided in advance for the conversion
 C) Housing 96x76 can be delivered in advance

Distance between brackets

